International Journal of Sales & Marketing Management
Research and Development (IJSMMRD)
ISSN (P): 2249–6939; ISSN (E): 2249–8044
Vol. 9, Issue 2, Dec 2019, 57–68
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TECHNICAL INNOVATIONS AS AN AID FOR ENHANCING CUSTOMER EXPERIENCE IN EMERGING MARKETING LANDSCAPE

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ABSTRACT

Marketing dynamics keep demanding for new innovations for enabling marketers to attract and retain their customers. Exhibitions have traditionally accomplished this task, but modern marketing augments for better techniques to keep and retain customers. Thus marketers have over the years improvised on various modes to attract new customers. Technology thus has aided marketers to innovate and improvise to help process information to understand and perceive customers better so as to optimize resources for sustainability and growth. This conceptual paper attempts to bring out the possibility of technological innovations that have aided marketing to better satisfy consumers at every touch point.

As technology evolves, it is rapidly pushing the bar higher for more intuitive user interactions and transcendent usability. With these revolutionary developments, achieving a customer experience (CX) that exceeds the customers' expectations is becoming increasingly challenging. Social Customer Service platforms such as Conversocial will put your mind and customer experience at ease. It's the era of the customer, and they're calling the shots.

Most modern and innovative technologies called Virtual Reality, Beacon Technology and software's like Toneapiare adapted from the technological world for multiple usages in the marketing arena. Various literature on its testing suggests its practical application in business world. Hence an attempt is made to illustrate a conceptual framework for these growing technologies to occupy a novel space in the changing marketing landscape.

Virtual Reality a content marketing trend for 2017 would use software to generate realistic images, sounds, and sensations for recreating and simulating user's physical presence.

Beacons are small, battery-powered, always-on devices that use BLE technology to transmit one-way signals to devices like smart phones and tables within a range of 300 feet, creating a more engaging in-store experience.

Toneapi a software that enables analysts, brands and marketers to understand and optimize the tone of content based on emotion, sentiment and activation.

The conceptual paper would highlight the role played these three technologies in enhancing customer experience and help modern marketers succeed.

KEYWORDS: Technical Innovations in Marketing, Marketing Trends, Virtual Reality, Beacon Technology & Toneapi

Received: Jul 08, 2018; **Accepted:** Aug 02, 2018; **Published:** Sep 20, 2018; **Paper Id.:** IJSMMRDDEC20195

Original Article

INTRODUCTION

Marketing constantly adjusts and reacts to changes in technology enabling the marketers to attract and retain their customers most efficaciously. Evolving from exhibitions marketing has progressed through various stages, augmenting through better techniques to keep and retain customers. Thus marketers have over the years improvised on various modes to attract new customers. Technology thus has aided marketers to innovate and

improvise through content data analytics understanding and perceiving customer's better so as to optimize resources for sustainability and growth. Martech, a term that blends marketing and technology has evolved. It can be opined that, anyone involved with digital marketing is dealing with Martech, since digital by its very nature is technology based. The term "Martech" specifically applies to major initiatives, methods, processes, efforts and tools that harness technology to achieve marketing goals and objectives. This conceptual paper attempts to bring out the possibility of technological innovations that have aided marketing to better satisfy consumers at every touch point.

Role of Technology in Marketing

Technology has in its own unique way impacted the field of marketing expressively, along with almost every other discipline of business. In marketing, the impacts of technology are diverse and most imperative. Organizations are tasked with managing more marketing options than ever before, and consumers are more integrated with personalized experience and data-driven exposure than before. Ad blindness is an interesting outcome of modern technology-driven marketing. As consumers are exposed to more and more sponsored content, the ability to ignore marketing materials has grown quite high. As consumers are accosted with more and more content, they have evolved with the capacity to consciously and subconsciously ignore any type of sponsored ad content (bountless). Thus, there is a need for content marketing with the needed technical improvements and innovations to fight competition and delight customers with their own individualistic experiences.

Technological Aid for Marketing

Most modern and innovative technologies called Virtual Reality, Beacon Technology and software's like Toneapi are adapted from the technological world for multiple usages in the marketing arena. Various works of literatures on its testing suggest its practical application in business world. Hence an attempt is made to illustrate a conceptual framework for these growing technologies to occupy a novel space in the changing marketing landscape.

Virtual Reality a content marketing trend for 2017 would use embed hardware and software to generate realistic images, sounds and sensations for recreating and simulating user's physical presence for giving them real like experience.

Beacons are small, battery-powered, always-on devices that use BLE technology to transmit one-way signals to devices like smart phones and tables within a range of 300 feet, creating a more engaging in-store experience.

Toneapi is the software that enables analysts, brands and marketers to understand and optimize the tone of content, based on emotion, sentiment and activation.

STATEMENT OF THE PROBLEM/CONCEPTUAL ISSUE

It is hard to overstate how revolutionary the new marketing technologies could be for businesses and customer interactions. These technologies will soon prove invaluable for marketing, and it will also offer the chance for companies to understand customer needs like never before (Research, 2015). Technological shift has made customer-centricity an imperative for marketers, and it was a topic that dominated the conversation at Consumer Electronic Show (CES) 2016. The ultimate result is that marketers must focus on creating personalized experiences that people want. The problem can be symbolically stated as,

Technical innovations (Effective marketing middleware) + Customer experience = Effective Marketing

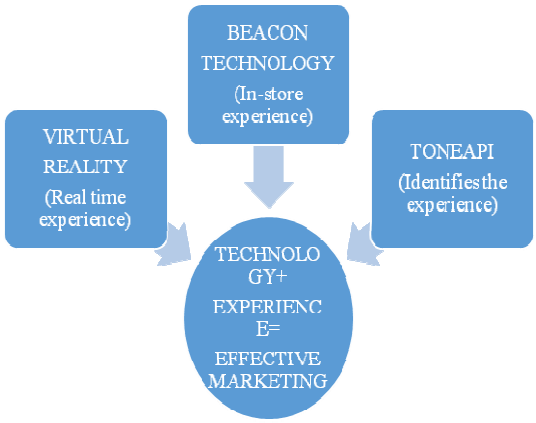


Figure 1.

This conceptual paper tries to state the impact of the following three technologies on customers experience as follows;

- Virtual Reality gives Real-time experience
- Beacon gives in-store experience
- Toneapi identifies the kind of experience each customer requires.

Illustrative Model depicting "Technology for Consumer Experience"

Model Depicting "Technology + Customers Experience = Effective Marketing" with the help of 3 Most Modern Technologies.

If reach, relevance, attractiveness, speed, customization etc. are gauges used for technological advancement then it is an experience that is valued most when it comes to customer's perceptions and aspirations. To give customers a unique and contented experience they should adapt themselves to the most modern technologies and redesign workflows within and between enterprises in order to optimize end-to-end processes and automate non-value-added tasks. So in order to be efficient and effective in all spheres of marketing, a business should adapt to the most modern technologies that would offer superior and distinctive experience to the customers.

OBJECTIVES

The conceptual paper is organized to unlock the massive potential of new marketing technologies. It mainly aims to;

- To study the role of these technologies as a marketing solution provider for businessmen in the digitally disrupted environment.
- To evaluate the impact of these technologies in enhancing customer experience.
- To suggest reasons for adopting these technologies and evaluate its cost effectiveness.
- To address the misconceptions and privacy concerns of customers getting associated with these technologies.

Understanding the relevance of these technologies in the modern business scenario and to dig deep into the objectives mentioned above, the following arguments are laid below:

ARGUMENTS

- An effective marketing middleware can stimulate customer response positively fulfilling both businesses and customers' expectations and perceptions.
- Based on theoretical support, these technologies can be the next big thing in the marketing arena, if it is effectively utilized by exploring the massive potentials and by successfully overcoming the delusions in the minds of customers.

METHODOLOGY

The theoretical framework would stand to establish the objectives. Unbiased methods would acquire the literature from various fields of business to substantiate the arguments made in the conceptual paper. More insights would be given as to the future scope of investigation in this relevant area.

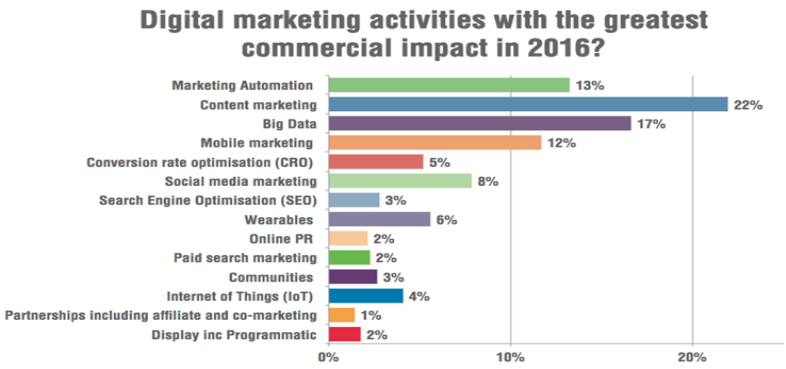
LIMITATIONS

- Analytical restraints exist as the concept relies on previously collected data.
- These technologies are emerging concepts and awareness among the public is minimal.

LITERATURE REVIEW

Marketing as a concept gives due regard to the consumers ever since its evolution and this shall be no different in the future years to come. Marketers, in fact will be more concerned about customer-centric marketing, customer experience, customer journeys, customer involvement, customer insights and other ways of analysing, attracting, delighting, fixing and obsessing over customers. Marketers will start to shift away from static content towards more engaging forms of content and would depend more on data-driven marketing, but data is not very useful unless there is technology and analysis in place to help make sense of it. It is high time to ignore big mounds of data and focusing instead on simple insights about customers that help marketers to be more relevant to individuals and audiences. Marketers today are spending at least 50 percent of their time on content, and are coming up with more ways to automate marketing. Marketing automation alone is worth $5.5 Billion and is leading the way in lead generation and prospect nurturing (Moraes, 2015).

Digital Marketing would make a significant impact in the years to come, as it is evidences from the figure above. Of the combined impact that is created by various medium in digital marketing, Market Automation, content marketing big data analysis lead the statistics.



Source: Smart Insights,2016 Digital Marketing Trends

Figure 2.

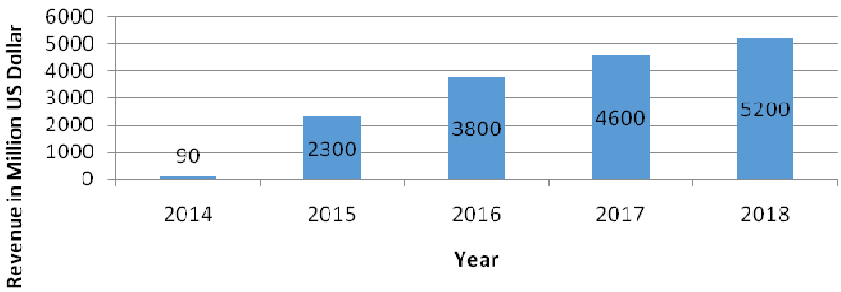
Understanding these three activities and analysing its growth, it is evident that technological innovations have started to trigger marketing activities. Following are 3 technical innovations that would help the marketers to effectively achieve their marketing goals by stimulating customers to experience positively. Marketing teams will be increasing their use of marketing technologies and that will fuel the need for marketing middleware. Marketing middleware allows different marketing technologies to work together and provides analysis of customer interactions across different types of marketing operations, procedures and campaigns helpful for marketers. Gartner for Marketing Study in 2014 had estimated that, by 2017, 50 percent of consumer product investments will be redirected to customer experience innovations, which is an indicator that customer experience will really become an important brand differentiator. This conceptual paper attempts to focus on the significance of **Virtual Reality, Beacon Technology and Toneapi** and the resultant impact that it would create to both the marketers and customers by acting as an effective marketing middleware.

VIRTUAL REALITY (VR)

Virtual reality technology will inevitably have a huge impact on the way that marketers engage consumers. One of the biggest keys to marketing is personalization. With the ability to literally tell 360-degree stories, companies will be able to engage customers like never before. It uses software to generate realistic images, sounds and sensations for recreating and simulating user's physical presence and allows the customers to have a real experience. This would help both the marketer and consumer choose the most appropriate product/service.

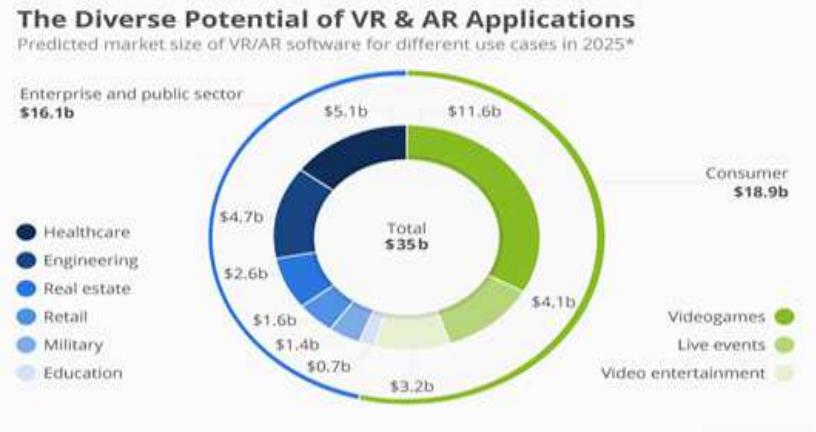
In order to be integrated and cohesive which makes customers feel connected, especially the younger generation, the marketers need to be offering exclusive content that has an expiration date. Ephemeral marketing ("less is more") is all about communication that's shorter and more to the point. In a world where people have less and less time, this model works. VR presents a unique opportunity for advertisers to reach a completely immersed audience. If VR is done right by advertisers, it could lead to much higher forms of user engagement by offering consumers more opportunities to interact with content by effectively avoiding advertisement blocks.

While considering the cost, even though it's expensive to start, you can't ignore the fact that there are big-time companies investing in VR who have the power to shape where technology and the media are heading. So in long run VR is going to be less expensive as the technology is getting sophisticated and cheap as time passes. Top companies such as Coca-Cola, McDonald's and the New York Times etc. are already leading the world in the application of VR for marketing purposes.



Source: Statista 2016.

Figure 3: Revenue Forecast for Virtual Reality Products Worldwide.



Source: Statista 2016 (Goldman Sachs Global Investment Research)

Figure 4.

BEACON TECHNOLOGY

Beacon Technology comes into picture and burgeons by acting as a saviour to store retailers. It can create a tailored experience for customers through strategic personalization. Beacons have multiple uses, which are small, battery-powered, always-on devices that use BLE (Bluetooth Low Energy) technology to transmit one-way signals to devices like smart phones and tables within a range of 300 feet. The target devices get information which is not retransmitted and hence beacons are like lighthouses(Martin, 2016). Beacons have found their applications in sports, concerts, airports, trade shows and conferences to engage and learn more about their targeted consumers. Thus more or less the goals behind beacons are to increase customer engagement to bring about increased sales through customer loyalty. Cost of beacon range between $5 and $30 based on the battery and signal range. Size wise they are reduced to stickers to be stuck in wall making them popular(Martin, 2016). Beacons are a revolutionary concept as it inculcates modern technology giving customer personalized experience. Thus beacons are also set to boost the retail industry by increasing customer experience.

Table 1: Benefits of Implementing Beacon Technology

Opinion of Retailers	Percentage
Ability to track and understand customers buying patterns using beacons.	71
Increased ability to target and attract customers	65
Customers are more engaged in the store	59
Ability to create more relevant and compelling offers in the store	53
Increase in sales	24
Increase in offer redemption	24

Source: 2015 Store Operations survey.



Source: Business Intelligence March 2015.

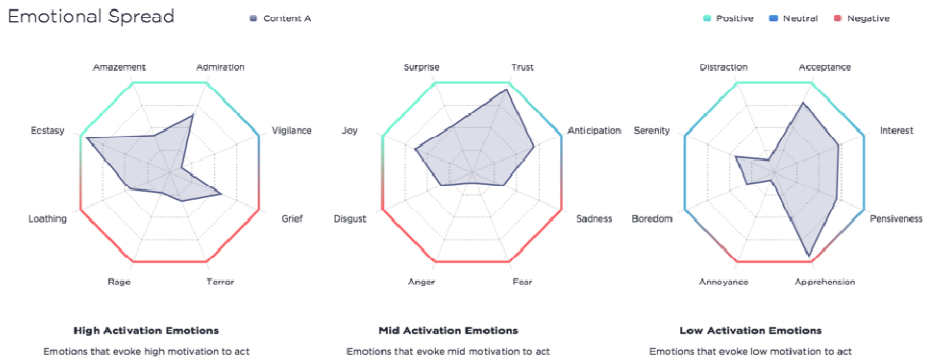
Figure 5: Retail US in-Store Influence.

TONEAPI

Emotions Speak Louder Than Words!

Toneapi a software that enables analysts, brands and marketers to understand and optimize the tone of content based on emotion, sentiment and activation. It helps to test before investing in advertisements, email newsletters or press releases etc. It also facilitates comparison of industry leaders, gain intelligence on competitors and gather nuggets of information that allow you to win business pitches. Toneapi includes 24 emotions, 3 activation levels and positive/negative sentiment. It helps firms compare content side-by-side and thereby taking the most advantageous and favourable decisions eliminating the chance of making losses(Hughey, 2015). Basically this product from Northern Irish firm Adore board, was first a Web-based app that scrutinizes (and potentially improves) the emotional impact of written text.

Coming to the cost aspect Toneapi, which is now available as a public beta, has a starting price for agencies at $25,000 per year, which is not a huge expense while analysing the fact that it would ensure data on the market since the product/service is made out of customers aspirations and perceptions. There are companies giving free trials on this and after which it costs only round $149 per month. Emotional targeting allows brands to tap into this minefield – capturing sentiment within their digital content and bringing together the right consumers, in the right frame of mind, with the right emotive message to create a strong connection and increase the effectiveness of digital advertising and marketing(Drum, 2015). Emotional targeting enables advertisers to capture the consumer's real-time mood and deliver the most appropriate message through advertisement, according to the emotional context of the page, maximising brand recall and ROI.



Source: toneapi.com, 2015

Figure 6.

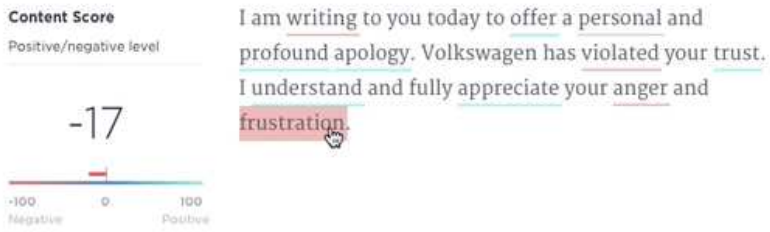
Situations Where Content is Analysed using Toneapi Software

Situation 1



Source: twicopy.org, 2016.

Figure 7: Situation 1.



Source:twicopy.org, 2016.

Figure 8: Situation 2.

Situation 2

As technology evolves, it is rapidly pushing the bar higher for more intuitive user interactions and transcendent usability providing superior customer experience. With these revolutionary developments, achieving a customer experience (CX) that exceeds the customers' expectations is becoming increasingly challenging and puzzling. One winning ingredient to the never-ending challenge of keeping customers happy is to know the ins and outs of your consumers' behaviours from the very beginning. In customer service and, more importantly, in marketing, **communicating with your customer means anticipating their wants, needs, and problems even before they arise.** In 2017 and beyond, the battle will not be won on the price page or product features or even product quality, but rather on the entirety of your customer experience. So these are a combination of 3 technologies that act as an efficient marketing middleware that boosts sales and at the same time enhances customer experience.

FINDINGS

- Virtual Reality, Beacon Technology and Toneapi, the new concepts in the field of marketing helps businesses to track customers' needs and wants most effectively to best suit the customers.
- Contented data provided from these devices provide valuable input for effective utilization of resources for business success.
- Customers prefer real time and tailored experiences and hence these technologies source data to understand the customer's needs and wants to provide them with products and services which are even beyond their expectations and imaginations.
- Virtual reality ads are rising in popularity to create captive audiences, who will be fully immersed to enjoy real-time experience.
- Beacons would act effective interfaces between store and non-store retailing providing superior in-store experiences.
- Toneapi is sophisticated software that tracks customer's emotions using computer programmes and algorithms, thereby identifying the needs of the customers even before they identify their need. In short it recognises the experiences that the customers prefer well in advance.
- These technologies benefit both the customers and marketers alike; helping customers get their experience and marketers their sales.

- These technologies are considered to be cost effective.
- Virtual Reality is well-thought-out as an expensive mode of marketing, but only in primary stages. In the long run VR is going to be less expensive as their will be new entrants to this field and technology is getting sophisticated and cheap as time passes.
- Beacons are considered to be a very inexpensive way of marketing. Cost of beacon range between $5 and $30 based on the battery and signal range which makes it affordable for small marketers.
- Toneapi has a starting price for agencies at $25,000 per year, which is not a huge expense while analysing the fact that it would ensure that the product/service is made out of customer's aspirations and perceptions. There are companies giving free trials on this and after which it costs only round $149 per month which is far better than spending too much money on marketing techniques that may not work.
- There are misconceptions and privacy concerns relating to these technologies existing in the minds of the customers. While analysing VR, it's more of delusion and for Beacons and Toneapi there would be more concern from customer's part about their privacy, as their location and emotions are getting tracked.
- An efficient combination of a marketing middleware gives enriched experience for the customers which results in effective marketing, improved sales and better market position.
- These findings justify the 2 arguments made at the beginning.

SUGGESTIONS

- The modern marketing mantra is "less is more" which is termed as ephemeral marketing. So the marketers have to be precise, accurate and specific in its marketing related activities. VR, Beacon Technology, Toneapi are some innovative technologies that helps the marketers to be contented if it is effectively deployed in the business.
- These technologies especially Toneapi can leverage the semantic understanding of feelings and behaviours in content to identify emotions, and thus marketers can improve their overall engagement and relationship with the brand.
- A business should consider its nature, type, size etc. and a suitable marketing middleware can be blended to give the best results.
- In the modern challenging business environment, understanding the real desires and expectations of the consumers would be the need of the hour and these technologies would help marketers predict this accurately.
- Adapting the price and product to suit the consumers experience is redefining the rules of the competition. Thus adopting these technologies would help marketers offer outstanding products/services to their consumers.
- Technological up gradation is a cost incurring factor, however in the long run the cost would stand to decrease. Moreover satisfied and contended consumers tend to spend more than dissatisfied and discontented consumers. Thus the additional cost incurred for Customer Experience Marketing (CEM) would stand justified in the long run.

- It takes 12 positive experiences to make up for one unresolved negative experience (Understanding customers, Ruby Newell-Legner). A 5 percent reduction in the customer defection rate can increase profits by 5-95 percent (Bain & Company). So the marketers have to be really cautious in giving customers superior experiences at any cost, to survive, grow and flourish in the market.

- Effective and efficient business in the future would depend upon the blending of innovative technology to tailor make promotions to target specific customers. Studies by Jupiter Research have shown that relevant emails produce 18 times more revenue than standard email blasts. Use the data you have on customers to tailor marketing messages and up-sell the products/services.

- The privacy and fallacies in the mind of the customers are expected to get vanished off as the customers are getting more educated about technology trends and implications. Clarity and transparency of marketers from their part can solve this issue to a great extent.

CONCLUSIONS

Gartner for Marketing Leaders study in 2014 has estimated that by 2017, 50 percent of consumer product investments would be redirected to customer experience innovations. This indicates that customer experience would the most important brand differentiator. To achieve greater levels of customer experience, there is an urgent need to process the data to employ information for the need to efficiently deploy an appropriate marketing middleware to have a good CEM system.

"Customer experience is fast growing to be the next P in the marketing mix, which ought to be managed purposely and carefully as other P's of Marketing Mix." Lisa Macpherson, Hallmark.

So customer experience should no longer be left to the customer service team. Marketing activities in the organisation needs to take a proactive approach to create efficient marketing middleware comprising of the most modern and innovative technologies that focus on the customer and deliver them an amazing experience. Customers need a personalized and consistent experience across all marketing channels, moving from just 'managing' the customer experience towards 'improving' the customer experience. In short, the use of technology and data should aim at bringing a 'WOW' effect among the customers, offering them the value that extends above their expectations to successfully survive, grow and flourish in the up-to-the-minute changing world.

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